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van Kleef, G.A.

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Animals may be more reliably emotional than humans

Commentary on [Rowan et al.](#) on *Sentience Politics*

Gerben A. van Kleef

Department of Psychology, University of Amsterdam

Abstract: Despite considerable advances in the study of animal sentience, reluctance to credit non-human animals with emotional capacities persists. I argue that this reluctance is untenable in light of (evolutionary) theory and empirical evidence. Humans may differ from animals in their ability to reflect on, reason about, and deliberately regulate their emotions. If anything, however, this implies animals' emotional displays provide a more valid and reliable window into their internal states than do humans', whose displays may be strategically altered. Any signs of pleasure or distress thus constitute direct readouts of animal wellbeing. It is time we start treating animals accordingly.

[Gerben A. van Kleef](#), Ph.D., is a professor of social psychology. His main research programs revolve around emotion, power/hierarchy, social norms, conflict, and cooperation. In studying these topics, he combines social-psychological approaches with insights from behavioral economics, law, and (evolutionary) biology.

[Website](#)



1. Introduction. Can non-human animals feel pleasure and pain? The comprehensive review of the history, science, and politics of animal sentience by Rowan and colleagues (2022) reveals that thinking about this question has changed considerably over the centuries. However, notwithstanding the notable progress, reluctance to grant animals emotional capacities persists. I argue that this reluctance is untenable both on theoretical and empirical grounds, and posit that the emotional displays of animals may in fact provide more reliable information about their internal feeling states than do those of humans.

2. The evolution of emotional capacities. Human and non-human animals are the products of eons of adaptations to evolutionary pressures. Emotions constitute one particularly significant suite of adaptations (Darwin, 1872). Emotions probably contributed to the survival of species via a combination of intra-individual and inter-individual processes (Keltner et al., 2006; Van Kleef, 2016). Intra-individually, emotional experiences alert the organism to aspects of the environment that require attention, and they guide adaptive behavioral responses (Farb et al., 2013; Frijda, 1986). Inter-individually, emotional expressions signal pertinent information to others about the situation (e.g., safety vs. danger), relational orientations (e.g., cooperation vs. competition), and behavioral intentions (e.g., fight vs. flight), which enables organisms to coordinate their actions (Fridlund, 1994; Van Kleef, 2009). Clearly, these functions of emotions would have been equally critical to the survival of human and non-human animals. Moreover, the fact that the brain centers responsible for emotion processing (e.g., the amygdala) are evolutionarily much older than the areas responsible for higher-order cognitive functions (e.g., the cortex) makes it exceedingly unlikely that the capacity for feeling and emotion is unique to humans, as we share the underlying neural substrates with many other animal species. Thus, the reluctance to credit animals with

emotions seems untenable for theoretical reasons (also see Van Kleef, 2018): To deny animals emotional capacities is to deny the laws of evolution.

3. Evidence of emotional processes in non-human animals. There is overwhelming evidence that numerous non-human animals have the capacity to experience, express, and respond to emotions. It is evident from systematic patterns of expressive displays, vocalizations, behaviors, brain activity, and physiological and hormonal responses that multiple species experience a range of affective states, including (but not limited to) pleasure, pain, relaxation, excitement, anxiety, fear, distress, sadness, and frustration (Boissy et al., 2007; Briefer et al., 2022; Brosnan & de Waal, 2003; Cook et al., 2018; Mendl et al., 2010; Phelps & LeDoux, 2005; Range et al., 2009; Weary et al., 1998). Darwin's (1872) pioneering observations uncovered reliable patterns of emotional responses in non-human animals that prepare them for adaptive behaviors and at the same time provide outwardly perceptible cues about the animal's internal state. Consistent with theoretical arguments about the role of emotions in communication and behavioral coordination (Keltner & Haidt, 1999; Van Kleef, 2009), internal feeling states become observable in numerous animal species through facial displays, vocalizations, and/or non-verbal behaviors (Seyfarth & Cheney, 2003; Waller & Micheletta, 2013). Such expressions can elicit matching behavioral responses from other individuals that contribute to effective coordination (Buttelmann & Tomasello, 2009; Mirsky et al., 1958; Zych & Gogolla, 2021). In keeping with the principle of phylogenetic continuity, these patterns show notable parallels with interpersonal emotional dynamics in humans (Van Kleef, 2016). Thus, the reluctance to accord non-human animals emotional capacities is untenable in light of empirical evidence.

4. Emotional awareness and the validity of emotional displays as cues to internal feeling states. That there are parallels between the emotional processes observed in humans and those observed in many non-human animal species is not to say that human and non-human emotional capacities are identical in all respects. It seems uncontroversial that humans differ from (most) non-human animals in their ability to reason about, reflect on, and strategically modify their emotions in the interest of momentary goals (although there is evidence of strategic use of false emotional displays by chimpanzees; de Waal, 1982). It is conceivable that such differences in meta-emotional awareness sustain beliefs that animals' emotions are somehow less "real" and can therefore be devalued or discarded. I would argue, however, that animals' lesser conscious control over their emotions actually renders their emotions *more* real and, therefore, informative about their wellbeing.

In humans, the link between internal feeling states and emotional expressions may be attenuated for various reasons (Ekman, 1993). For example, people may deliberately up- or down-regulate emotional expressions in view of situational requirements (e.g., display rules) or social goals (e.g., impression management, attempts to influence others), thereby creating a disconnect between the emotions they feel and the emotions they express (Van Kleef & Côté, 2022). Assuming that such considerations play a lesser role in non-human animals, it follows that animals exhibit a tighter connection between internal states and outward expressions than humans do. This implies, in turn, that any signs of pleasure, distress, or agitation emitted by animals provide more valid insight into their internal feeling states than similar signs provide of humans' feelings.

5. Conclusion. It is so obvious from the state of the science that many non-human animals are capable of feeling that denying it seems pointless (see, for example, the commentaries of Bekoff, 2022; Burrell, 2022; Damasio, 2022; de Waal, 2022). It would appear that the continuing reluctance among some to credit animals with emotional faculties is motivated (e.g., by meat dependency, desire for profit etc.), and possibly sustained by the notion that animals cannot verbalize their emotions. If anything, however, animals' lesser conscious control over their emotions implies that their emotional displays are more direct reflections of their internal states than is the case with humans, whose emotional expressions may be regulated for social, cultural, or instrumental reasons. In that sense, the emotional displays of non-human animals have greater face-validity than those of humans. Thus, even though we cannot ask animals how they feel, we can gain insight into their internal worlds – and their welfare – by observing their emotional displays. Although one must be prudent not to engage in undue anthropomorphism, erring on the side of anthropocentric arrogance places us in an even more questionable position (Chapman & Huffman, 2018). There is no scientific basis for assuming that humans are more emotional than other animals. The onus is on humans to act accordingly.

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